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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,899	04/27/2001	Mohamed Anisur Rahman	2925-0469P	7572

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EXAMINER

RAMPURIA, SHARAD K

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/842,899

Applicant(s)

RAHMAN ET AL.

Examiner

Sharad K. Rampuria

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 29 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sladek, Jr. et al. & Nevo et al. further in view of Kari et al.

1. Regarding Claim 1, Sladek disclosed A system of billing in a user configurable wireless network (abstract), comprising:

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a base station controller to establish and maintain communication between a wireless unit and the wireless network; (MSC/VLR; fig.6-7; col.23; 22-31 & BSC; col.13; 54-64)

a home location register in operative communication with the base station controller to support applications and services; (HLR; fig.6-7; col.23; 11-20)

a user end in operative communication with the service data node, allowing the user to implement service creation and service negotiation without service provider intervention; (56; fig.2; col.10; 35-56) and

Sladek fails to disclosed a service data node module in direct operative communication with the base station controller and the home location register to coordinate the applications and services supported by the home location register. However, Nevo teaches in an analogous art, that a service data node module in direct operative communication with the base station controller and the home location register to coordinate the applications and services supported by the home location register; (fig.3 & 5; col.8; 53-61 & col.9; 29-38) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a service data node module in direct operative communication with the base station controller and the home location register to coordinate the applications and services supported by the home location register in order to provide a service node to establish a data link from the mobile station to the network via a base station.

The above combination fails to disclosed a billing manager. However, Kari teaches in an analogous art, that a billing manager in operative communication with the service data node module, to bill the user based on the user implemented service creation and service negotiation.

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(col.5; 53-col.6; 16) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a billing manager in order to provide billing in radio network.

3. Regarding Claim 3, The above combination disclosed all the particulars of the claim except a database to store quality of services. However, Kari teaches in an analogous art, that The system of claim 1, wherein the billing manager further comprises:

a billing mediator in operative connection with the service data node to receive and distribute data from the service data node; a billing processor in operative connection with the billing mediator to process the data from the billing mediator; a billing order manager in operative connection with the billing processor to manage the processed data from the billing processor; and a customer information processor in operative connection with the billing order manager to process customer information. (col.5; 53-col.6; 16) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a billing manager in order to provide billing in radio network.

Claims 18-35, 37 & 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sladek, Jr. et al. in view of Kari et al.

18. Regarding Claim 18, Sladek disclosed A method of billing for service creation and/or negotiation in a wireless network (abstract), comprising:

receiving a request for service creation or negotiation; (col.14; 57-col.15; 5)

accessing a logically linked dynamic storage in accordance with the request; (col.15; 30-50)

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obtaining, from the storage, service information associated with the request; obtaining, from the storage, user information associated with the service information; (col.15; 6-29) obtaining, from the storage, network information associated with the user information; comparing the service information and user information with the associated network information; providing the requested service based on the comparison; (col.15; 51-63 & col.28; 14-33)

Sladek fails to disclosed a billing manager. However, Kari teaches in an analogous art, that billing for the requested service. (col.5; 53-col.6; 16) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a billing manager in order to provide billing in radio network.

19. Regarding Claim 19, Sladek disclosed The method of claim 18, wherein the logically linked dynamic storage is dynamically updated in accordance with the user and network information. (col.19; 59-67)

20. Regarding Claim 20, Sladek disclosed The method of claim 18, wherein the step of providing the requested service is performed by accessing the logically linked dynamic storage without having to access any other portions of the network to minimize signal overloading. (col.20; 3-19)

21. Regarding Claim 21, Sladek disclosed A method of billing for service creation and/or negotiation in a wireless network (abstract), comprising:

receiving a request for service creation or negotiation; (col.14; 57-col.15; 5)

accessing a logically linked dynamic storage in accordance with the request; (col.15; 30-50)

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obtaining, from the storage, service information associated with the request; obtaining, from the storage, user information associated with the service information; (col.15; 6-29) obtaining, from the storage, network information associated with the user information; comparing the service information and user information with the associated network information; providing the requested service based on the comparison (col.15; 51-63 & col.28; 14-33)

Sladek fails to disclosed a billing manager. However, Kari teaches in an analogous art, that billing for the requested service. (col.5; 53-col.6; 16) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a billing manager in order to provide billing in radio network.

22. Regarding Claim 22, Sladek disclosed The method of claim 21, wherein the logically linked dynamic storage is dynamically updated in accordance with the user, service and network information. (col.19; 41-50 & 59-67)

23. Regarding Claim 23, Sladek disclosed The method of claim 21, wherein the step of providing the requested service is performed by accessing the logically linked dynamic storage without having to access any other portions of the network. (col.20; 3-19)

24. Regarding Claim 24, Sladek disclosed A method of billing for service creation and negotiation in a wireless network (abstract), comprising:
receiving a request from a user to create or negotiate a service; (col.14; 57-col.15; 5)

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accessing a storage having user information, service information and network information stored therein; (col.15; 30-50)

comparing the request with the user information, the service information and the network information; providing the data service to the user based upon the comparison; (col.15; 51-63 & col.28; 14-33)

Sladek fails to disclosed a billing manager. However, Kari teaches in an analogous art, that billing the user for the provided data service. (data packet; col.5; 53-col.6; 16) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a billing manager in order to provide billing in radio network.

25. Regarding Claim 25, Sladek disclosed The method of claim 24, further comprising:

periodically obtaining user, service and network information; and

dynamically updating the storage by periodically storing the periodically obtained user, service and network information. (col.19; 41-50 & 59-67)

26. Regarding Claim 26, Sladek disclosed The method of claim 25, wherein the dynamic storing includes storing network information into at least a first database. (col.20; 3-19)

27. Regarding Claim 27, Sladek disclosed The method of claim 26, wherein the dynamic storing includes storing user information into a second database. (col.20; 20-31)

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28. Regarding Claim 28, Sladek disclosed The method of claim 24, wherein the accessing step is performed without having to access any other portions of the wireless network. (col.20; 32-54)

29. Regarding Claim 29, Sladek disclosed A method of user configurable for service creation and negotiation in a wireless network (abstract), comprising:

receiving a request from a user to create or negotiate a service; (col.14; 57-col.15; 5)

accessing a storage having user information, service information and network information stored therein; (col.15; 30-50)

comparing the request with the user information, the service information and the network information; providing the data service to the user based upon the comparison; (col.15; 51-63 & col.28; 14-33)

Sladek fails to disclosed a billing manager. However, Kari teaches in an analogous art, that billing the user for the provided data service. (data packet; col.5; 53-col.6; 16) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a billing manager in order to provide billing in radio network.

30. Regarding Claim 30, Sladek disclosed The method of claim 29, further comprising a step of dynamically storing the network information and the user information into the first database, the network information being wireless network information. (col.19; 41-50 & 59-67)

32. Regarding Claim 32, Sladek disclosed The method of claim 29, wherein the accessing step is performed without having to access any other portions of the wireless network. (col.20; 32-54)

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33. Regarding Claim 33, Sladek disclosed The method of claim 30, further comprising the step of periodically updating at least the first database with updated network and user information. (col.20; 3-19)

34. Regarding Claim 34, Sladek disclosed A method of billing in a wireless network communications system (abstract), the method comprising:

establishing a database in the wireless network; (col.14; 57-col.15; 5)

providing services into the database; (col.15; 30-50)

allowing a user to select a service by accessing the database without service provider intervention; (col.15; 51-63 & col.28; 14-33)

Sladek fails to disclosed a billing manager. However, Kari teaches in an analogous art, that billing the user based on the selected service. (data packet; col.5; 53-col.6; 16) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a billing manager in order to provide billing in radio network.

35. Regarding Claim 35, Sladek disclosed The method of claim 34, wherein the billing is based on a wireless packet call of the selected service. (col.13; 54-64)

37. Regarding Claim 37, Sladek disclosed The method of claim 34, wherein the billing is based on a profile change of the user. (col.19; 41-50 & 59-67)

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40. Regarding Claim 40, Sladek disclosed The method of claim 34, wherein the billing is performed on a call-by-call or session-by-session basis. (col.28; 14-33)

Claims 13, 31 & 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sladek, et al. & Kari et al. further in view of Lohtia et al.

13. Regarding Claim 13, The above combination disclosed all the particulars of the claim except the Web-based network information. However, Lohtia teaches in an analogous art, that The system of claim 12, further comprising:

a second database having Web-based network information dynamically stored therein; and wherein the central processing node compares the requests with the network information and the user information stored in the first and second databases. (pg.4; 0032) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include Web-based network information in order to provide information to a communication device in response to a request for particular service.

31. Regarding Claim 31, The above combination disclosed all the particulars of the claim except the Web-based network information. However, Lohtia teaches in an analogous art, that The method of claim 30, further comprising a step of dynamically storing Web-based network information into a second database. (pg.4; 0032) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include Web-based network information in

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order to provide information to a communication device in response to a request for particular service.

38. Regarding Claim 38, The above combination disclosed all the particulars of the claim except content push services. However, Lohtia teaches in an analogous art, that The method of claim 34, wherein the selected service comprises content push services. (SMS; pg.3; 0024) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include content push services in order to provide information to a communication device in response to a request for particular service.

Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sladek et al. & Kari et al. further in view of Sarkki et al.

39. Regarding Claim 39, The above combination disclosed all the particulars of the claim except transaction based services. However, Sarkki teaches in an analogous art, that The method of claim 34, wherein the selected service comprises transaction based services. (col.4; 1-12) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include transaction based services in order to provide transaction based billing for telephone services.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sladek et al., Nevo et al., & Kari et al. further in view of Bianconi et al.

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2. Regarding Claim 2, The above combination disclosed all the particulars of the claim except a database to store quality of services. However, Bianconi teaches in an analogous art, that The system of claim 1, wherein the service data node module further comprises:

a database to store quality of services; (0010; pg.2).

a dynamic billing information processor in operative communication with the database, to determine actual use of a service on a call-by-call or session-by-session basis; (0010; pg.2) and a radius accounting server in operative communication with the dynamic billing information processor, to correlate the determined actual use from the dynamic billing information processor. (0033; pg.4). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a database to store quality of services in order to provide location based billing of data services.

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sladek et al. & Kari et al. further in view of Bianconi et al.

36. Regarding Claim 36, The above combination disclosed all the particulars of the claim except a database to store quality of services. However, Bianconi teaches in an analogous art, that The method of claim 34, wherein the billing is based on a quality of service of the selected service. (0010; pg.2). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a database to store quality of services in order to provide location based billing of data services.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 4-12, 14-17 are rejected under 35 U.S.C. 102 (e) as being anticipated by Sladek et al.

4. Regarding Claim 4, Sladek disclosed A system allowing service creation and negotiation in a wireless network (abstract), comprising:

a receiver to receive a request from a user to create or negotiate a service; (col.14; 57-col.15; 5)

and

a central processing node to process the request by comparing the request with user information, service information (col.10; 8-18) and

network information dynamically stored therein, and to provide the requested service to the user based upon the comparison. (col.28; 14-32).

5. Regarding Claim 5, Sladek disclosed The system of claim 4, wherein the central processing node further comprises a first database having the network information dynamically stored therein. (col.20; 3-19)

6. Regarding Claim 6, Sladek disclosed The system of claim 5, wherein the central processing node further comprises a second database having the user information dynamically stored therein. (col.20; 20-31)

7. Regarding Claim 7, Sladek disclosed The system of claim 4, further comprising a first database having the network information dynamically stored therein. (col.20; 32-54)

8. Regarding Claim 8, Sladek disclosed The system of claim 7, further comprising a second database having the user information dynamically stored therein. (col.20; 32-54)

9. Regarding Claim 9, Sladek disclosed The system of claim 4, wherein the central processing node compares the network information and the user information without having to access any other portions of the wireless network. (col.20; 32-54)

10. Regarding Claim 10, Sladek The system of claim 4, wherein the central processing node periodically updates the network information and the user information. (col.19; 41-50)

11. Regarding Claim 11, Sladek disclosed A system allowing service creation and negotiation in a wireless network (abstract), comprising:
at least a first database storing network information and user information; (col.14; 57-col.15; 5)
and

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a central processing node processing user requests by accessing the first database, (col.10; 8-18) comparing the requests with the network information and the user information dynamically stored in the first database, and providing the requested services to the users based upon the comparisons. (col.28; 14-32)

12. Regarding Claim 12, Sladek disclosed The system of claim 11, wherein the first database has the network information and the user information dynamically stored therein, the network information being wireless network information. (col.20; 3-19)

14. Regarding Claim 14, Sladek disclosed The system of claim 11, wherein the central processing node accesses the first database without having to access any other portions of the wireless network. (col.20; 32-54)

15. Regarding Claim 15, Sladek disclosed The system of claim 11, wherein the central processing node periodically updates at least the first database with updated network and user information. (col.20; 3-19)

16. Regarding Claim 16, Sladek disclosed The system of claim 11, wherein the first database has a plurality of portions being physically distributed throughout the entire wireless network, the distributed portions being connectively linked with the central processing node. (col.17; 29-54 & col.18; 28-44)

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17. Regarding Claim 17, Sladek disclosed The system of claim 11, wherein the central processing node includes the first database. (col.18; 28-44)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharad Rampuria whose telephone number is 703-308-4736. The examiner can normally be reached on Mon-Fri. (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

Sharad Rampuria
May 27, 2004


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